

CLAIMS

What is claimed is:

1. A base panel for use in a plasma display device, comprising:  
a panel member;  
electrodes formed on said panel member in a predetermined pattern; and  
a partition structure comprising unit partitions, discontinuously formed on said panel member parallel to each other, to partition a discharge space, and each of the unit partitions having auxiliary partitions extending from both ends of each unit partition.
  
2. The base panel according to claim 1, further comprising a dielectric layer that covers said electrodes and is formed on said panel member.
  
3. The base panel according to claim 1, wherein the unit partitions are disposed in a delta arrangement.
  
4. The base panel according to claim 1, wherein the auxiliary partitions of one of the unit partitions does not contact those of an adjacent one of the unit partitions forming a common discharge space with the one unit partition.
  
5. A plasma display device having a base panel having a partition structure, comprising:  
a first panel;  
address electrodes formed on said first panel in a predetermined pattern;  
a first dielectric layer formed on said first panel and covering said address electrodes;  
a partition structure comprising unit partitions discontinuously formed on said first dielectric layer to partition a discharge space, the unit partitions being parallel to said address electrodes and each having auxiliary partitions;  
red, green and blue phosphor layers coated in the partitioned discharge space;

a second panel, which is coupled to said first panel to form the discharge space between said first and second panels, said second panel being transparent;

sustaining electrodes formed on an inner surface of said second panel and comprising pairs of first and second electrodes disposed at a predetermined angle with respect to the address electrodes; and

a second dielectric layer formed on said second panel and covering said sustaining electrodes.

6. The plasma display device according to claim 5, further comprising black matrix layers, each of said black matrix layers being formed between a corresponding pair of the first and second electrodes.

7. The plasma display device according to claim 6, wherein each of said black matrix layers is formed over areas corresponding to the disconnected portions of the unit partitions.

8. The plasma display device according to claim 5, wherein the unit partitions are disposed in a delta arrangement.

9. The plasma display device according to claim 5, wherein the auxiliary partitions of one of the unit partitions does not contact those of an adjacent one of the unit partitions forming a common discharge space with the one unit partition.

10. A base panel for use in a plasma display device, comprising:  
a panel member;  
electrodes formed on said panel member in a predetermined pattern;  
a dielectric layer formed over said panel member and covering said electrodes; and  
unit partitions formed on said dielectric layer, pluralities of said unit partitions being disposed in rows across said electrodes,  
wherein

adjacent pairs of said unit partitions in a common row define a unit discharge space extending across a corresponding one of said electrodes, and adjacent ones of said unit partitions do not contact each other.

11. The base panel of claim 10, wherein each of said unit partitions further comprises an end from which an auxiliary partition extends toward the corresponding one of said electrodes.

12. The base panel of claim 11, wherein each of said unit partitions further comprises an additional end, wherein an additional auxiliary partition extends towards the corresponding one of said electrodes.

13. The base panel of claim 10, wherein each of said unit partitions further comprises auxiliary partitions extending from ends of each of said unit partitions towards corresponding ones of said electrodes.

14. The base panel of claim 10, wherein centers of the unit discharge spaces of adjacent rows follow a respective one of said electrodes.

15. The base panel of claim 10, wherein centers of the unit discharge spaces of adjacent rows are at an angle to a respective one of said electrodes.

16. The base panel of claim 13, wherein the auxiliary partitions of each of said unit partitions extend away from said unit partition at an equal angle.

17. The base panel of claim 13, wherein the auxiliary partitions of each of said unit partitions are disposed as to define an H shape.

18. The base panel of claim 13, wherein the auxiliary partitions of each of said unit partitions extend symmetrically away from said unit partition as to define V shapes from the respective ends.

19. The base panel of claim 10, further comprising phosphor layers, each of said phosphor layers being disposed in a respective one of the unit discharge spaces.

20. The base panel of claim 19, wherein said phosphor layers are disposed on said dielectric layer and on opposing side of said unit partitions within the respective unit discharge spaces, but are not disposed between rows of said unit partitions.

21. A plasma display device, comprising:

a base panel;

base electrodes on said base panel in a predetermined pattern;

a base dielectric layer on said base panel and covering said base electrodes;

unit partitions formed on said base dielectric layer, pluralities of said unit partitions being disposed in rows across said base electrodes, wherein

adjacent pairs of said unit partitions in a common row define a unit discharge space across a corresponding one of said base electrodes, and

adjacent ones of said unit partitions do not contact each other;

phosphor layers, each phosphor layer being disposed in a corresponding one of the unit discharge spaces;

a front panel opposite to and connected to said base panel;

front electrodes on an inner surface of said front panel at a predetermined angle with respect to said base electrodes; and

a front dielectric layer on said front panel and covering said front electrodes.

22. The plasma display panel of claim 21, wherein each of said unit partitions further comprises auxiliary partitions extending from ends of each of said unit partitions toward corresponding ones of said base electrodes.

23. The plasma display panel of claim 22, wherein said phosphor layers are not disposed outside the unit discharge spaces.

24. The plasma display panel of claim 23, further comprising a black matrix layer on said front panel and covered by said front dielectric layer, said black matrix layer being disposed between adjacent front electrodes so as to not be over one of said phosphor layers.

25. The plasma display panel of claim 24, wherein said phosphor layers are not disposed between adjacent rows of said unit partitions

26. The plasma display panel of claim 21, wherein pluralities of said unit partitions of adjacent rows are disposed diagonally as to form deltas.

27. The plasma display device of claim 21, wherein each of said front electrodes further comprise projecting electrodes disposed parallel with said base electrodes.

28. The plasma display device of claim 21, wherein each of said front electrodes further comprise sub electrodes disposed parallel to and connected to each other.